

**Laboratory Name:** IMPET FRONTIER R&D LABORATORY

**Company:** Turkish Aerospace

**Laboratory Manager:** Ali İhsan ÖZ

**Laboratory Manager Short Biography:**

Ali İhsan Öz is working as Innovation Manager at Turkish Aerospace in the Department of Strategy and Technology Management. After the study of Aeronautic and Space Engineering in the University of Stuttgart and graduation as Diplom Ingenieur (master degree) in 2005 he worked two years in the aerospace industry and ten years in the automobile industry. As an Application Consultant for design and PDM systems he started to work at Airbus S.A.S. for Cenit AG in Hamburg. Afterwards he developed whole car simulation models for electric cars to optimize the energy management at Daimler AG for TWT GmbH in Stuttgart. Between 2011 and 2017 he operated as a part owner at Bosch-Mahle Turbosystems GmbH. In that time, he was responsible for actuators, sensors and kinematic elements from prototype phase till serial production. In parallel he was China Team Leader for Simultaneous Engineering where he coordinated the standardization and localization of the parts in China. Since December 2017 he is managing the research activities for new technologies at Turkish Aerospace.

**Research Area:**

- Advanced Composite Technologies
  - Enhancement of physical properties of composites with nanoparticle integration
  - Manufacturing of thermoplastic matrix composite materials and investigating of joining techniques
- Functional Surface Coatings
  - Transparent conductive coatings for electromagnetic shielding
  - Icing protection electrothermal system based on nanomaterials
- Additive Manufacturing Technologies
  - Investigation of additive manufacturing process parameters on microstructure and mechanical properties